

Urban District Council of Oswaldtwistle.

ANNUAL REPORT

OF THE

MEDICAL OFFICER,

Including details of work done by the Sanitary
Inspector & Lady Health Visitor,

FOR THE

DISTRICT OF OSWALDTWISTLE,

For Year ended 31st December, 1920.

Oswaldtwistle :

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1921.



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Health Committee,

From April, 1920, to April, 1921.

—:0:—

Councillor T. W. WALTON, Chairman.

„ W. DUCKWORTH.

„ H. DUERDEN.

„ E. GIBSON.

„ F. GREENWOOD.

„ J. RILEY.

„ T. SCHOLES.

„ L. WHITTAKER.

Meetings: First Thursday after first Monday in each month,
at 3 p.m.

Maternity and Child Welfare Committee.

The Chairman & Members of the Health Committee, with
the following co-opted Lady Members :—

Mrs. GASTALL.

Mrs. USHER.

Mrs. KENYON.

Mrs. THORNLEY.

Meetings: First Thursday after first Monday in each month,
at 2-30 p.m.

Health Department.

—:O:—

Medical Officer of Health: ALFRED E. TOWNLEY, M.B., Ch.B.,
D.P.H. (Manchester).

Fellow of the Royal Institute of Public Health.

Member of the Royal Sanitary Institute.

Sanitary Inspector: - JAS. ALDERSON, A. R. San. I.

Lady Health Visitor: Mrs. F. M. Mc.KENDRY, C.M.B.,
Cert. R.I.P.H.

Clerk to the Health Department: - GEO. WILKINSON.

Disinfector: - J. H. CLEGG.

Caretaker of Smallpox Hospital: - J. H. CLEGG.

Foreman of Scavenging Department: - W. LILL.

Caretaker of Slaughterhouses: WM. WILSON.

Steam Disinfector Operator: - WALTER WHITE.



*To the Chairman and Members of the Urban District
Council of Oswaldtwistle.*

GENTLEMEN,

I have the honour to submit to you my 17TH ANNUAL REPORT on the Health & Sanitary condition and administration of Oswaldtwistle, for the year ending December 31st, 1920.

The general arrangement of this report is similar to that of the previous year, the details of work done by the Sanitary Inspector and Lady Health Visitor being included in my report, instead of being shewn separately and distinct, as was formerly the case. This is done at the request of the Ministry of Health in order to standardise the reports from all districts, and the scheme suggested by the Ministry has been adhered to as closely as possible.

The Registrar General has supplied figures shewing the estimated population at the middle of the year under review as as a basis for calculating the Birth Rate and the various Death Rates. This figure he fixes at 14,942, which, in my opinion, is a rather low estimate, since in the previous year the Birth Rate was calculated on an estimated population of 14,968, and figures compiled from the food offices gave a population of 16,488. Which of these figures is most nearly correct it is impossible to say until after the Census, to be taken this year, but, should any great variation from the figure computed by the Registrar General occur, the rates given in this report will be seriously affected and will be falacious.

It will be seen, however, from the figures and diagrams which follow that the Death Rate is very low, and only misses being the lowest of which I have record by a mere fraction.

The Birth Rate also is most satisfactory, being the highest for the last nine years, and shows a most marked rise over the previous four years.

As will be seen from the Table on page 16, the death rates from respiratory diseases, tuberculosis, cancer, and epidemic diseases are all very satisfactory and fall considerably below the average for the previous 10 years.

The latter especially is worthy of note, for although slightly higher than the previous year, it is much less than the average for the whole country and taken in conjunction with the infantile mortality, which is by far the lowest of which I have record, is a point on which the Council should should congratulate themselves. The two latter Death Rates (Infantile and Zymotic) are always a certain index to officials connected with public health matters of the sanitary condition of their area, and it is a source of pleasure to me to be able to present such satisfactory figures to you for the year.

I feel sure also that the Sanitary Inspector & Lady Health Visitor will feel highly gratified at the results of the past year's work, and to them I owe a debt of gratitude for the energy they have displayed in assisting to make such a satisfactory condition of things possible.

The most notable sanitary improvements made during the year have been the erection of a new high pressure steam disinfecter and progress in converting old privies and ashpits, the number of these conversions will be found in the following pages, for details of which I am obliged to the Sanitary Inspector.

Particulars of the housing conditions will be found in the report, and also details of work done in connection with the Factory and Workshops Act, the latter being again included at the request of the Home Office.

To the Chairman and Members of the Council, the Clerk, and other Officials of the Council, particularly the Accountant and Sanitary Inspector, I am indebted for much kind assistance during the year in the carrying out of the work of the Public Health Department.

In conclusion, I should like to draw the attention of the Council and the Health Committee to my present unsatisfactory office accommodation, and to request that steps be taken as early as possible to have my own original office, now occupied by the War Pensions' Committee, returned to me. The room I now occupy is neither private, convenient or healthy when one is confined to it for some two or three hours. Moreover, adjoining as it does the Council Chamber, which is also used for Committee work, I am constantly disturbed by overhearing discussions in the adjoining room, which necessarily distracts attention from work in hand, and I have on several occasions had to leave important matters over until such time as the Council room was unoccupied.

I am, Gentlemen,

Your obedient Servant,

ALFRED E. TOWNLEY,

Medical Officer of Health.

March 30th, 1921.

Population and Houses, 1911 Census.

	A rea in statute acres. Land & inland water.	Families or separate occupiers.		POPULATION.						Institutions, large establishments, vessels, etc., 1911, included in cols. 4 and 6.
		1901	1911	1901		1911				
				Persons	Persons	Males	Females	No.		
Col. 1.	2	3	4	5	6	7	8	9	10	
Oswaldtwistle.	4885	3074	3554	14200	15714	7527	8187	12	56	
WARDS :—										
Foxhill Bank ..	....	....	857	....	3820	1799	2021	..	....
Immanuel ..	....	....	952	....	4133	2014	2119	1	1
Saint Michael's ..	....	....	203	....	886	435	451	..	....
Saint Oswald's ..	....	....	629	....	2874	1392	1482	1	1
Saint Paul's ..	....	....	913	....	4001	1887	2114	10	54
			3554							

Population. The census taken in April, 1911, shewed the population to be 15,714. For the purposes of this report, the birth and death rates are calculated on an estimated population of 14,942.

Taking the whole of the Township, the density of population is 3 per acre. The Urban portion of the district however has a far greater density.

The population according to the Census of

1801	was	2710		1861	was	9246
1811	„	3512		1871	„	10282
1821	„	4960		1881	„	12206
1831	„	5897		1891	„	13296
1841	„	6643		1901	„	14192
1851	„	7654		1911	„	15714

Houses Inhabited.

1891	...	2753
1901	...	3067
1911	...	3554

Houses Uninhabited.

1891	...	516
1901	...	297
1911	...	94

Rates & Rateable Value. The General District Rate for the year ending 31st March, 1921, is 8/4 in the £, and the Poor Rate is 7/2 in the £.

The Assessable Value for the District Rate is £54,752.

The Rateable Value for the Poor Rate is £62,944.

Physical Features & General Characters of the District. The Township lies between latitude 53 degrees 42 minutes and 53 degrees 45 minutes north, and longitude 2 degrees 21 minutes to 2 degrees 26 minutes west, in the Parliamentary Division of Accrington, and County of Lancashire, and Poor Law District of the Blackburn Union.

Boundaries of the District.

Altitude in feet
above sea level along
the boundaries.

On the north by the districts of Church and Rishton,	from 400 to 550
On the south by Haslingden and Yate & Pickup Bank	„ 850 to 1225
On the east by Accrington	... .. „ 446 to 950
On the west by Blackburn	... .. „ 500 to 850

Area. The Area of Oswaldtwistle comprises 4,885 statute acres 23 of which are water.

The town is chiefly built of stone, and lighted with gas supplied from works belonging to the District Council. The river Tinker flows through the Township, and the Leeds and Liverpool Canal also passes through, while railway facilities are provided by the L. & Y. Railway.

There is also a service of electric trams supplied by the Corporations of Blackburn and Accrington.

Apart from the main built up portion are the following hamlets:—

Belthorn	...	2½ miles from the Town Hall.
Knuzden	...	2 „ „
Stanhill	...	1 „ „
Broadfield	...	$\frac{3}{4}$ „ „
Spread Eagle	...	$\frac{3}{4}$ „ „

Feet above
sea level.

Altitudes. At the boundary with Church,			
at the bottom of Union Road	...	the altitude is	423
At Moscow Mill Street	...	„	450
Opposite the Town Hall	...	„	483
At the boundary with Blackburn on Blackburn Road	...	„	490
At Mother Red Cap Inn, on Blackburn Road	...	„	532
In New Lane, which is the highest part of the built up portion of the district	...	„	581
At the centre of Stanhill Village	...	„	598
At the Shoulder of Mutton Hotel, Cross Edge	...	„	874
At the National School, which is the highest portion of the Belthorn Village	...	„	1020

The soil consists of loam, while the subsoil of the built-upon portion is mostly marl and clay, and in some of the outlying districts peat.

Stanhill Village, Broadfield, and Belthorn Village are mostly upon the grit rock, which crops up to the surface in a number of places. These villages are upon the higher altitudes—from 600 feet to 1000 feet above sea level.

Rainfall. I am obliged to Mr. Hunter, the Surveyor, for the following figures shewing the rainfall for each month during the year:

Rainfall from January 1st to December 31st, 1920.

		Inches.
January	...	4.02
February	...	4.97
March	...	6.18
April	...	6.65
May	...	6.80
June	...	3.53
July	...	7.38
August	...	2.36
September	...	2.58
October	...	2.09
November	...	2.76
December	...	3.56
		<hr/>
		54.83

The greatest rainfall in a month since January, 1882, was 17.92 ins. in Sept., 1918, and the lowest .31 ins. in February, 1895.

Table showing Rainfall in the following years.

1882	...	63.23 inches	1902	...	33.60 inches
1883	...	51.98 "	1903	...	56.42 "
1884	...	42.84 "	1904	...	35.97 "
1885	...	45.53 "	1905	...	36.16 "
1886	...	52.46 "	1906	...	41.19 "
1887	...	29.93 "	1907	...	44.00 "
1888	...	37.07 "	1908	...	42.77 "
1889	...	41.53 "	1909	...	49.78 "
1890	...	50.43 "	1910	...	59.50 "
1891	...	60.16 "	1911	...	62.41 "
1892	...	50.42 "	1912	...	63.37 "
1893	...	50.78 "	1913	...	53.91 "
1894	...	52.71 "	1914	...	66.19 "
1895	...	46.41 "	1915	...	56.26 "
1896	...	52.00 "	1916	...	59.15 "
1897	...	56.44 "	1917	...	53.54 "
1898	...	43.69 "	1918	...	70.91 "
1899	...	46.20 "	1919	...	49.72 "
1900	...	50.11 "	1920	...	54.83 "
1901	...	34.14 "			

Average rainfall for 10 years—1910 to 1919 inclusive: 64.97 inches.

Occupations. The inhabitants are employed at various trades, viz: Chemical Manufacturing, Cotton Spinning and Weaving. Coal Mining, Paper Making Calico Printing and Milk Farming, A large number are also employed in neighbouring iron and machinery works.

A large proportion of the female inhabitants are engaged in the cotton industry.

Hospital Accommodation is provided by the Accrington Victoria Hospital, the Blackburn & East Lancashire Infirmary, and the Blackburn Union Hospital. The local Nursing Association, which employs two Nurses, does a large amount of useful work in the Township, and their services are much appreciated.

A second-hand horse Ambulance was purchased during the year, by the Council, for the removal of cases of accident and sickness. It will accommodate two lying-down cases and two or three sitting cases.

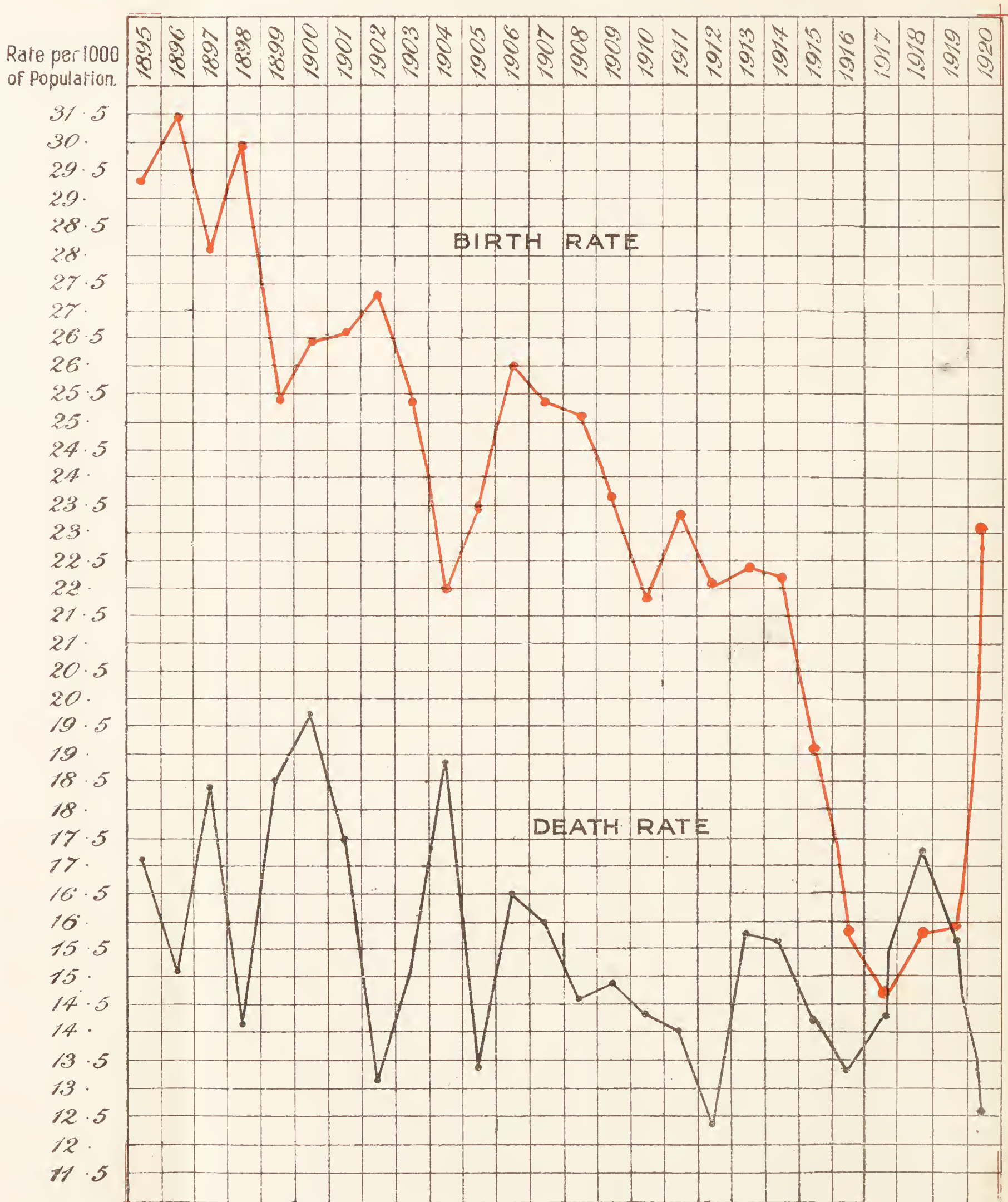
During the six months it has been in use, six cases have been removed as follows:—

	To Blackburn Infirmary.	To Accrington Hospital.	To Home.
Accident	nil	1	0
Sickness	2	2	1
Totals	2	3	1

Births. 347 births occurred during the year as follows:—

	Males	Females	Total
Legitimate	166	162	328
Illegitimate	9	10	19
	175	172	347

Chart showing Birth-rate and Death-rate for years
1895-1920 inclusive.



The birth rate on an estimated population of 14,942 is 23.2 per 1000, compared with 239 births and a birth rate of 15.96 in the previous year.

The average rate for the 10 years—1910-1919, is 19.2.

The number of notifications received under the Notification of Birth Acts was 346. 20 births were not notified. 17 still-births were notified.

Deaths. The deaths (civilians only) number 188 (82 males & 106 females), giving an annual death rate, calculated on a population of 14,942, of 12.5 per 1000, as against 225 deaths and a death rate of 15.6 per 1000 in the previous year, and an average of 14.72 per 1000 for the 10 years—1910-1919.



Table shewing causes of Death during 1920.

Causes of Death (Civilians only)		Males	Females	Total
ALL CAUSES	...	82	106	188
1 Enteric Fever	...	0	0	0
2 Smallpox	...	0	0	0
3 Measles	...	1	0	1
4 Scarlet Fever	...	0	0	0
5 Whooping Cough	...	0	0	0
6 Diphtheria and Croup	...	0	3	3
7 Influenza	...	1	3	4
8 Erysipelas	...	0	1	1
9 Pulmonary Tuberculosis	...	6	4	10
10 Tuberculous Meningitis	...	0	0	0
11 Other Tuberculous Diseases	...	3	0	3
12 Cancer, Malignant Disease	...	6	10	16
13 Rheumatic Fever	...	0	0	0
14 Meningitis	...	0	1	1
15 Organic Heart Disease	...	10	15	25
16 Bronchitis	...	5	14	19
17 Pneumonia (all forms)	...	3	5	8
18 Other Respiratory Diseases	...	2	2	4
19 Diarrhoea, &c. (under 2 years)	...	2	0	2
20 Appendicitis & Typhilitis	...	1	3	4
21 Cirrhosis of Liver	...	0	0	0
21a Alcoholism	...	0	0	0
22 Nephritis & Bright's Disease	...	3	4	7
23 Puerperal Fever	...	0	1	1
24 Parturition, apart from Puerperal Fever	...	0	2	2
25 Congenital Debility, &c.	...	3	7	10
26 Violence, apart from suicide	...	8	3	11
27 Suicide	...	0	2	2
28 Other defined Diseases	...	27	25	52
29 Causes ill-defined or unknown	...	1	1	2

Deaths of Infants under 1 year of age:—

	Males	Females	Total
Legitimate	10	11	21
Illegitimate	2	1	3
	12	12	24

The total of 24 infantile deaths represent a rate of 69.16 deaths per 1000 births, compared with 32 deaths and a mortality of 133.89 in the previous year, and an average of 122.0 for the 10 years—1910-1919.

Diagram showing the Infantile Death-rate per 1,000 Births during the years 1895-20 inclusive.

Infantile
Death Rate
per 1000 Births.

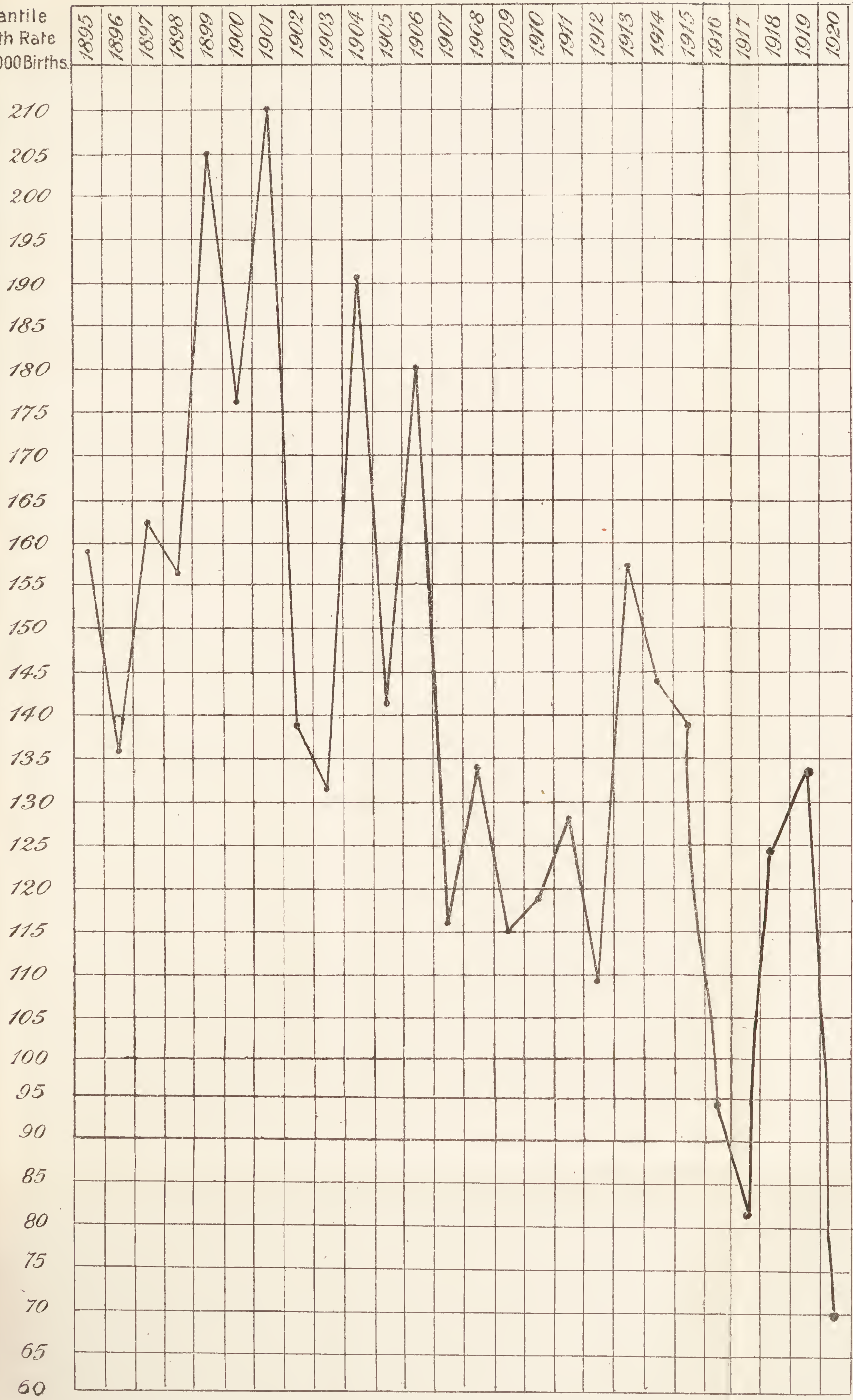
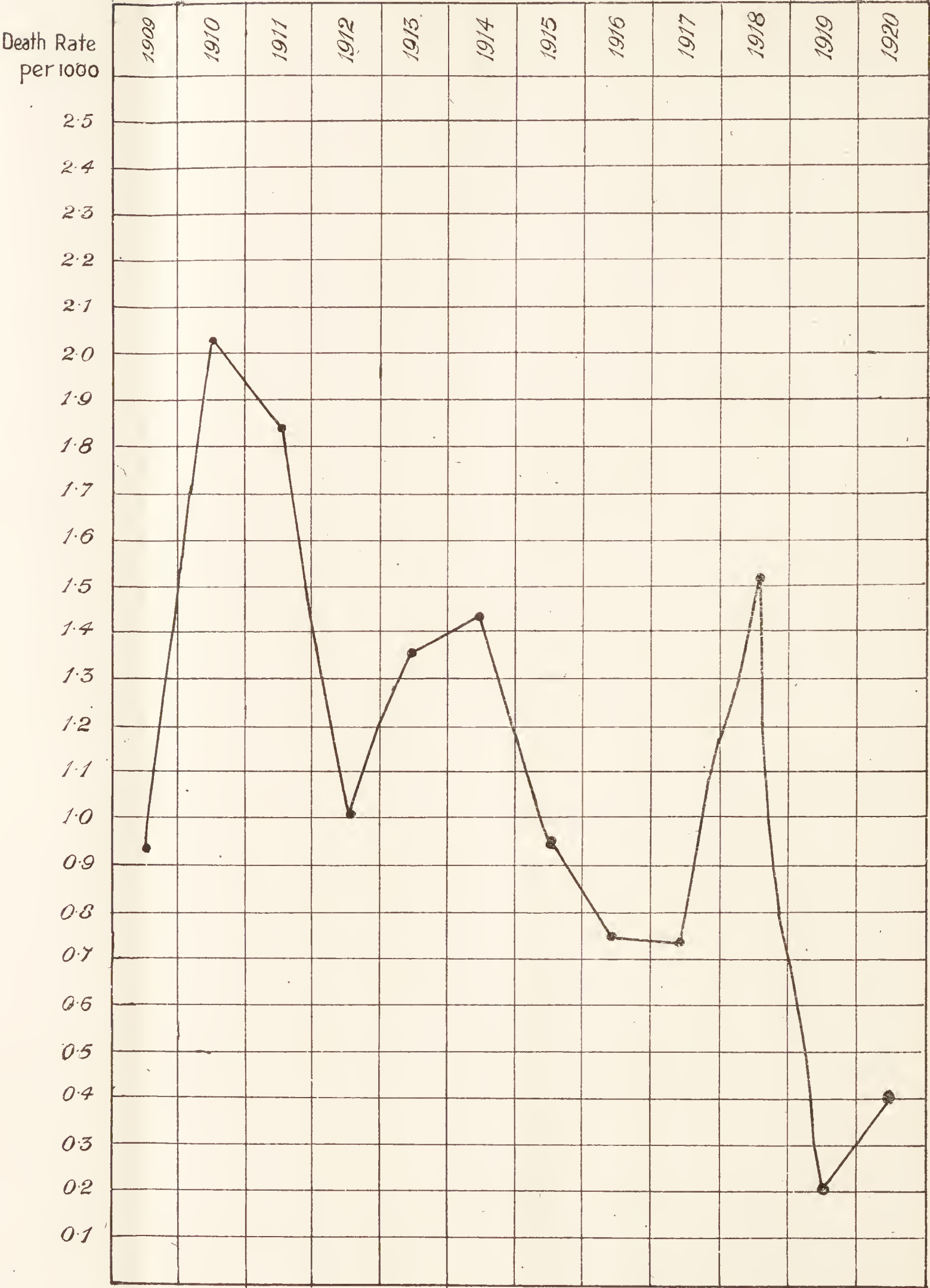


Diagram shewing the Annual Death Rate from Zymotic Diseases during 1909-1920 inclusive.



Other Death Rates.

	No. of Deaths	Death Rate	Previous year	Average previous 10 years
Pulmonary Tuberculosis	10	0.66	0.48	0.75
Other forms of ,,	3	0.19	0.06	0.18
<hr/>				
Total Tubercular Diseases	13	0.85	0.55	0.94
<hr/>				

Zymotic Death Rate	8	0.40	0.20	1.14
Diseases of the Respiratory Organs, excluding Phthisis }	31	2.07	3.75	2.9
Cancer ...	16	1.05	1.25	1.09

**Comparative Table of certain Rates per 1000 of
Population.**

Oswaldtwistle.	Birth Rate	Death Rate	Epidemic Death Rate	Phthisis Death Rate	Rate of Deaths under 1 year to 1000 Births
1920	23.2	12.5	0.40	0.66	69
1919	15.9	15.6	0.20	0.48	133
Mean of 10 years— 1910-1919 }	19.2	14.7	1.14	0.75	122

Increase or decrease in 1920, on—

Previous year	+7.3	—3.1	+0.20	+0.18	—64
10 years' average ...	+4.0	—2.2	—0.74	—0.09	—53

Birth Rate, Death Rate, and Analysis of Mortality during the Year 1920.

(Provisional figures. Provisional populations estimated to the middle of 1920 have been used for the purposes of this Table.
The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of Towns.)

	Birth Rate per 1000 Total Population	ANNUAL DEATH RATE PER 1000 POPULATION.										RATE PER 1000 BIRTHS.		PERCENTAGE OF TOTAL DEATHS.			
		All Causes	Enteric Fever	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under 2 years).	Total Deaths under One year.	Deaths in Public Inst's	Certified Causes	Inquest Cases	Uncertified Causes of Death	
England & Wales	25.4	12.4	0.01	0.00	0.19	0.04	0.11	0.15	0.28	0.48	8.3	80	24.3	92.2	6.6	1.2	
96 Great Towns, including London (Census populations exceeding 50,000)	26.2	12.5	0.01	0.00	0.22	0.04	0.14	0.16	0.31	0.43	10.4	85	31.3	92.2	7.1	0.7	
148 Smaller Towns (Census populations 20,000---50,000)	24.9	11.3	0.02	0.00	0.19	0.03	0.10	0.14	0.27	0.38	7.8	80	16.5	93.2	5.3	1.5	
London	26.5	12.4	0.01	0.00	0.22	0.05	0.17	0.22	0.30	0.47	9.5	75	46.8	91.2	8.6	0.2	
Oswaldtwistle	23.2	12.5	0.00	0.00	0.06	0.00	0.00	0.19	0.26	0.73	0.13	69	17.0	89.3	10.1	0.5	

**Table showing Births, Deaths, and Natural Increase
during the last 26 Years.**

Year	No. of Births	Rate per 1000	No. of Deaths	Rate per 1000	Natural Increase	Infant Deaths	Infant Death Rate
1895	419	29.33	241	17.2	178	67	159
1896	448	31.54	216	15.21	232	61	136
1897	422	28.13	275	18.33	147	92	163
1898	465	30.00	222	14.32	243	73	156
1899	392	25.29	287	18.51	105	80	204
1900	411	26.51	306	19.74	105	73	177
1901	386	26.62	254	17.52	132	81	210
1902	398	27.44	192	13.2	206	55	138
1903	392	25.48	222	15.2	170	52	132
1904	320	21.91	274	18.76	46	61	191
1905	344	23.56	194	13.29	150	49	142
1906	382	25.98	242	16.46	140	69	180.6
1907	377	25.40	238	16.08	139	44	116.7
1908	379	25.26	220	14.66	159	51	134.5
1909	354	23.60	223	14.86	131	41	115.8
1910	330	21.78	219	14.45	111	39	118.1
1911	367	23.34	221	14.05	146	47	128
1912	349	21.99	197	12.41	152	38	108.8
1913	359	22.88	255	15.89	104	56	157.3
1914	361	22.27	255	15.73	106	52	144.0
1915	310	19.12	221	14.26	89	43	138.7
1916	257	15.89	197	13.26	60	24	93.3
1917	221	14.63	194	14.32	27	18	81.4
1918	235	15.8	231	17.4	4	29	123.0
1919	239	15.96	225	15.65	14	32	133.89
1920	347	23.2	188	12.5	159	24	69.16

Water Supply. A full detailed account of the Waterworks will be found in my Annual Report for 1919.

The following extensions of water supply have been completed during the year 1920 :—

A 3" cast-iron pipe has been laid along Duckworth Hall Level, and services laid to Fern Gore Farm and Higher Rhoden Farm.

Complaint was made by the Stanhill Ring Spinning Co., Limited, of the low water pressure at their mill. It was therefore decided by your Council to lay new water pipes from Market Street, Church, past Woods Row to the works of Messrs. Wm. Blythe & Co., Limited, and Messrs. Wm. Metcalf, Ltd., in place of the present pipes which were in very bad condition; and also to apply to the Ministry of Health for sanction to borrow £1700—being the estimated amount required to carry out the work.

In the month of February, a new sand-washer was fixed at Cobbs Reservoir.

An analysis of each of your three water supplies, which has just been made at the Public Health Laboratory, Manchester, shews the following results:—

COBBS RESERVOIR.

Colour:	brown.	Turbidity:	slight.	Smell:	indistinct.
Oxygen absorbed at 27° in 4 hours in acid solution					0.241
Free and saline ammonia as NH ₃				...	0.0010
Albuminoid	„	„		...	0.0270
Nitrous nitrogen		„		...	nil
Nitric	„	„		...	0.036
Chlorides		as Cl		...	1.8
Phosphates		as H ₃ PO ₄		...	present
Hardness: temporary		as Ca CO ₃		..	2.5
Do. permanant		„		...	1.0
Do. total		„		...	3.5
Reaction:	lacmoid—alkaline. Methyl orange—alkaline —50 Phenolphthalein—acid.				
Action on bright lead foil 24 hours				...	0.04
Metals:	lead—none. Iron—traces.				

Aerobic micro-organisms growing in 3 days in nutrient gelatine at 20°C to 21°C:				No. of colonies in one gramme of water	No. of kinds of bacteria clearly recognisable
Non-liquefying bacteria	...	...		31	3
Liquefying	„	...	...	2	2
Other micro-organisms	...	...		0	0
				total 33	
				total 5	

Bacteria associated with sewage or faecal pollution were not found in 100 C.C.

PROFESSOR DELEPINE considers this water satisfactory from a bacteriological point of view and suitable for domestic purposes.

JACKHOUSE RESERVOIR.

Colour: yellowish brown. Turbidity: slight. Smell: indistinct.

Oxygen absorbed at 27° in 4 hours in acid solution		0.168
Free and saline ammonia as NH ₃	...	0.0800
Albuminoid ,, ,,	...	0.0360
Nitrous nitrogen ,,	...	nil
Nitric ,, ,,	...	0.040
Chlorides as Cl	...	1.7
Phosphates as H ₃ PO ₄	...	present
Hardness: temporary as Ca CO ₃	...	2.5
Do. permanent ,,	...	1.0
Do. total ,,	...	3.5

Reaction: lacmoid—alkaline. Methyl orange—alkaline — 50
Phenolphthalein—acid.

Action on bright lead foil 24 hours ... none

Metals: lead—none. Iron—traces.

Aerobic micro-organisms growing in 3 days in nutrient gelatine at 20° C to 21° C:				No. of colonies in one gramme of water	No. of kinds of bacteria clearly recognisable
Non-liquefying bacteria	...	...		21	3
Liquefying ,,	...	...		3	1
Other micro-organisms	...	...		0	0
				<div> <div>total</div> <div>24</div> <div>4</div> </div>	

Bacteria associated with sewage or faecal pollution were not found
in 100 C.C.

PROFESSOR DELEPINE considers that the free and albuminoid ammonia are very high although the water contains very few bacteria and shows no trace of pollution, and he thinks it desirable to have a second bacteriological examination made.

BELTHORN RESERVOIR.

Colour: green.	Turbidity: slight.	Smell: indistinct.	
Oxygen absorbed at 27° in 4 hours in acid solution			0.010
Free and saline ammonia as NH ₃	...		nil
Albuminoid ,, ,,	...		0.0024
Nitrous nitrogen ,,	...		nil
Nitric ,, ,,	...		0.040
Chlorides as Cl.	...		1.8
Phosphates as H ₃ PO ₄	...		present
Hardness: temporary as Ca CO ₃	...		2.5
Do. permanent ,,	...		1.0
Do. total ,,	...		3.5
Reaction: lacmoid—alkaline. Methyl orange—alkaline — 50 Phenolphthalein—acid.			
Action on bright lead foil 24 hours	...		none
Metals: lead—none.	Iron—traces.		

Aerobic micro-organisms growing in 3 days in nutrient gelatine at 20° C to 21° C:				No. of colonies in one gramme of water	No. of kinds of bacteria clearly recognisable
Non-liquefying bacteria	...	...		11	2
Liquefying ,,	...	...		1	1
Other micro-organisms	...	...		0	0
				total 12 3	

Bacteria associated with sewage or fœcal pollution were not found in 100 C.C.

PROFESSOR DELEPINE considers this water satisfactory from a bacteriological point of view and suitable for domestic purposes.

River Pollution. One instance only of pollution was discovered, caused by effluent from Nook Bone Works. The matter was reported to the River Pollution Authorities at Preston.

Sewerage, Drainage, & Sewage Disposal. Progress still continues to be made in the sewerage of the district with sanitary glazed pipes with cemented joints and ventilating manholes, and every year a large number of house drains are overhauled in converting privies to the water closet system.

Whenever new drains are laid they are examined by the Sanitary Inspector before being covered up, strict attention being paid to the joints and the fall of the pipes.

The sewage is dealt with at the outfall works in open septic tanks, and then passed through nine feet deep revolving sprinkler filters, the final treatment being upon the land filter area.

The effluent continues to be good, and is quite satisfactory to the Inspector of the Ribble Joint Committee.

The sewer behind Stone Bridge Terrace has been re-laid, and a sewer laid in the back road between Higher Heys and Lower Heys.

A portion of Blackburn Road has been paved, the back road behind Paddock Street excavated, ballasted and paved, and a portion of White Ash Lane excavated and ballasted and the laying of tar macadam in Park Lane completed.

I mentioned in last year's report that arrangements had been made with the Corporation of Blackburn to deal with sewage from Knuzden district, instead of your Council erecting special works, as was originally intended. In March last plans and estimates, which had been jointly prepared by your Surveyor and the Engineer of the Blackburn Corporation, were submitted to the Sewage Committee and approved and adopted. In the month of August a request was made to the Sewage Committee, by the Health Committee, for the work to be carried out as early as possible, and the Clerk was instructed by the former Committee to write to the Town Clerk of Blackburn informing him of the insanitary condition of the district, and urging for the work to be proceeded with. A draft agreement was submitted in October, but as certain clauses were not in accordance with the arrangements made by the Sub-Committee with the Blackburn Committee the Clerk was instructed to draw the attention of the Town Clerk of Blackburn to the matter. At the end of the year the agreement had not been completed.

The treatment of sewage at Belthorn Sewage works continues to give satisfactory results.

Scavenging and Removal and Disposal of House Refuse. The greater part of the work continues to be carried out by the employees of the Council, though in some of the outlying parts of the Township the cleansing is done by tender.

The whole of the Cleansing, which during the war was placed under the supervision of the Surveyor, was transferred at the beginning of the year under review to the Health Department, the Sanitary Inspector being appointed Cleansing Superintendent. The work has been carried out very efficiently.

Galvanised sheet-iron ashbins were introduced some years ago, and these are insisted upon in all new houses. They are also gradually being fixed in all houses where the existing ashes places are unsatisfactory.

The arrangements made with Accrington Corporation to destroy garbage and fish refuse from this district still hold good.

The following particulars of work done in cleansing as well as the subsequent paragraph in reference to Nuisances have been supplied to me by the Sanitary Inspector in accordance with Article XX. (16) of the Local Government Board's General Order of December 13th, 1910 :—

33 open ashpits have been replaced by dust-bins during the year, and there are now 807 bins and 1256 ashpits in the district.

No. of loads of ashes removed	...	5624
„ excreta „	...	643
„ fish refuse „	...	79
„ street sweepings including sludge from street gullies removed		574
„ shop refuse „	„	65
„ from Abattoirs „	„	26
		(for 6 months.)

The contents of pails are collected weekly and emptied down the Council's sewer at Heys Yard.

Nuisances.	Inspections	...	...	...	162
	Re-inspections	...	...	...	280
	No. of notices served (statutory)	...			21
	„ „ (preliminary)				127
	„ nuisances abated	...			162
	„ houses disinfected	...			50
	„ bedding „ (lots)	...			40
	„ interviews	...	...	...	115

Premises & Occupation Controlled by Bye-laws or Regulations. There are in the Township 16 fish fryers, 3 tripe boilers, 1 bone boiler, and 1 tallow refiner.

56 visits were paid to the Nook Bone Works, and on the whole the premises were found fairly satisfactory. The works at Bridge End are now only used for tallow melting.

Petroleum Acts. Seven licenses were granted under these Acts.

Food. (a) MILK.—The milk supplied within the Township is practically all produced in the district, and is of good quality. No shortage has been experienced during the year. There are 72 ~~hotel~~ ^{cow} keepers in the district, and 1 purveyor of milk other than ~~hotel~~ ^{cow} keepers.

Limewashing has been properly carried out at the farms, this having been greatly facilitated by the Council having purchased lime to retail to the farmers.

MILK (Mothers & Children) ORDER, 1918.—The total amount of milk supplied gratis under this order was 278 gallons, 1 pint. All applications for milk under this order were carefully enquired into to prevent abuse, and in cases of emergency, the Council granted powers to the writer to have milk supplied temporarily to suitable cases.

(b) **OTHER FOODS.**—Inspection of other foods has been systematically carried out, also the sanitary condition of premises where foods are manufactured, stored, or exposed for sale, and existing powers have been quite adequate for dealing with such places when occasion has arisen. Particulars of food condemned as unfit for human consumption will be found at the top of page 25.

The Bakehouses, 20 in number, have been found satisfactory, and there are none underground.

Slaughterhouses. There are seven Slaughterhouses in the district: two licensed and five at the public Abattoirs.

The latter were erected at a cost of of £1506, the site being freehold, subject to a rent-charge of £4/18/6, and 24 beasts, 6 calves, 100 sheep, and 24 pigs can be laired.

Very little slaughtering took place in the Township during the first half of the year owing to the food orders requiring the meat supply to be distributed from the Central Dépôt at Accrington Abattoirs.

During the year, the number of animals slaughtered at the Council's Abattoirs was as follows:—

Bullocks	...	...	49	Bulls	...	...	13
Heifers	...	...	153	Sheep	...	...	341
Cows ...	...	...	37	Lambs	...	...	1134
Calves	...	...	8	Pigs	...	...	90

Schools. There are 12 day schools in the Township, and their condition on the whole is good.

In the case of Holy Trinity School, I mentioned in my last years' report that the whole of the sanitary conveniences were most unsatisfactory and required reconstructing. This work has now been done, 5 pails and 5 privy middens having been abolished and 5 fresh water closets and 3 dust bins installed.

The following are particulars of food condemned during the year : 107lbs. of meat and organs for tuberculosis ; 13lbs. of meat otherwise diseased ; 101 lbs. of rabbits ; 22 lbs. of fish ; and 18 tins of condensed milk.

Infectious Diseases. As the table on page 26 shews, the incidence of infectious diseases in the Township has not been heavy during the year.

The cases of scarlet fever and enteric fever have been very few, but there were 18 cases of diphtheria, as against 10 in the previous year.

The compulsory notification of measles was cancelled early in the year.

One case of diphtheria was removed to the Blackburn Corporation Fever Hospital.

Two bacteriological examinations were made for the diagnosis of infectious diseases.

Cases of Infectious Disease notified during the Year 1920.

Notifiable Disease	Number of cases notified—At Ages—Years.							Total cases notified in each Ward of the District.					Total cases removed to Hospital	
	At all ages	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and up-wards	Immanuel Ward	Saint Paul's Ward	Foxhill Bank Ward	Saint Oswald's Ward		Saint Mich'l's Ward
Diphtheria, including Membranous Croup	18	0	5	11	1	0	1	0	5	5	6	2	0	1
Erysipelas	7	0	0	0	0	1	4	2	4	2	0	1	0	0
Scarlet Fever	6	0	1	5	0	0	0	0	3	1	0	2	0	0
Enteric Fever	1	0	0	1	0	0	0	0	0	0	1	0	0	0
Puerperal Fever	1	0	0	0	0	1	0	0	0	0	1	0	0	0
Ophthal. Neonatorum	9	9	0	0	0	0	0	0	2	2	2	2	1	0
Measles	8	6	2	0	0	0	0	0	1	4	1	2	0	0
Pulmon. Tuberculosis	13	0	0	0	3	8	2	0	3	5	2	3	0	6
Other forms of Tuberculosis	13	0	2	4	6	1	0	0	6	3	4	0	0	1
Pneumonia	7	0	2	1	0	2	2	0	3	1	1	2	0	0

Totals	83	15	12	22	10	13	9	2	27	23	18	14	1		8	
--------	----	----	----	----	----	----	---	---	----	----	----	----	---	--	---	--

Disinfection in all cases of notifiable infectious diseases is carried out as efficiently as possible in the absence of a fever hospital. Cases are isolated mostly in the premises in which they occur—always a difficult matter in cottage houses. Printed forms with the requisite precautions for each disease, and disinfectants, are supplied. At the end of the illness, the rooms are thoroughly disinfected with formic aldehyde and sulphur fumes, and the bedding sterilised in the steam disinfectator at the gasworks. Izal is used for disinfecting drains, etc.

During the year a new high pressure steam disinfectator has been erected and is working satisfactorily.

The premises kept for use as a Smallpox Hospital are always ready in case of emergency, and if occasion should arise, a patient could be admitted almost immediately. The agreement with Rishton U.D. Council to accommodate any cases arising in that Township still holds good.

During the year, I had under observation two persons who had been in contact with smallpox, neither of them fortunately contracted the disease.

Tuberculosis. During the year, the total number of notifications received was 43, viz :—

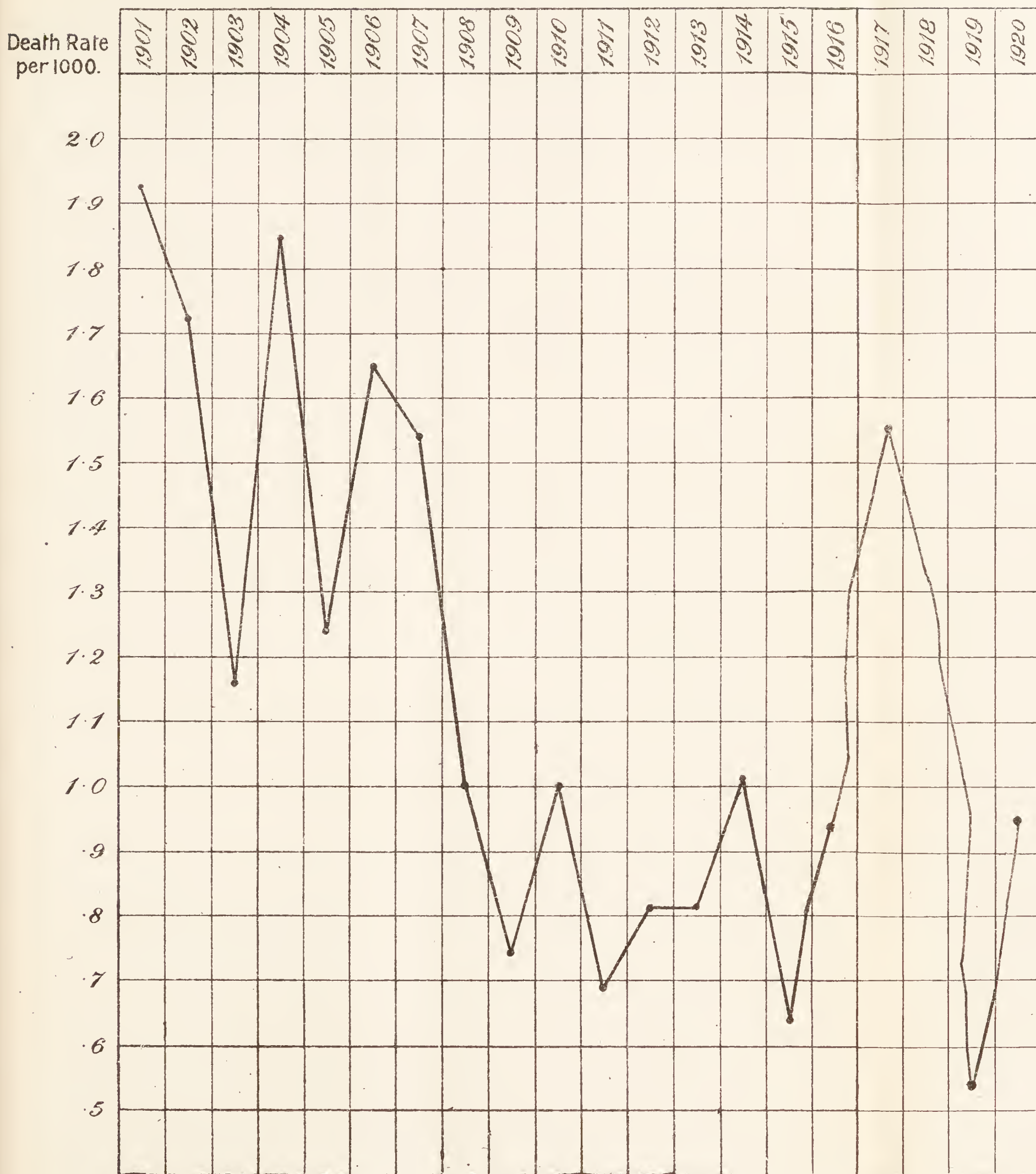
26	were on Form A.	Primary Notifications.
0	„	B. „ „ (Schools).
7	„	C. Admission to Sanatorium.
10	„	D. Discharge from Sanatorium.

A return I prepared for the Ministry of Health shewed that on December 31st, 1920, there were on my register 43 cases of Pulmonary Tuberculosis and 36 cases of Non-Pulmonary Tuberculosis in the Township on that date.

Table shewing details of Primary Notifications of Tuberculosis during Year 1920.

Ages	Pulmonary		Total	Non-Pulmonary		Total	Pulmonary & Non-Pulmonary		Total
	Males	Females		Males	Females		Males	Females	
Under 1 year of age	0	0	0	0	0	0	0	0	0
1 year and under 5 years	0	0	0	2	0	2	2	0	2
5 years	0	0	0	2	2	4	2	2	4
15 "	1	2	3	0	3	3	3	3	6
25 "	3	3	6	1	3	4	4	6	10
35 "	2	0	2	0	0	0	2	0	2
45 "	1	1	2	0	0	0	1	1	2
55 "	0	0	0	0	0	0	0	0	0
65 and over	0	0	0	0	0	0	0	0	0
Totals	7	6	13	5	8	13	14	12	26

The following Diagram shows the Annual Death-rate from Tuberculosis for the years 1901-20 inclusive.



Maternity & Child Welfare.

A whole-time Lady Health Visitor was appointed in January, 1916, who holds the Certificate of the Midwives' Board and the Certificate of the Royal Institute of Public Health for Health Visitors. Her duties include visiting of cases of measles, ophthalmia neonatorum, as well as all new-born children, inquiries into still-births, and visiting of expectant mothers whenever possible.

Up to the present time the Welfare work has been conducted in temporary premises, but during the past year a large house, known as "Barnfield," centrally situated on the main road, has been purchased by the Council, to be used as the Centre for Maternity and Child Welfare. Considerable alterations have been made to the building, which now contains:—On the ground floor: a large assembly room, waiting room, weighing room, and consulting room, as well as kitchen accommodation for use of caretaker. The rooms upstairs have not as yet been allocated for any special use apart from those which will be required by the caretaker.

The total cost of the building was £650, and cost of transfer, alterations, decorations and furnishing have amounted to £524 14s. 0d. to date.

Adjoining the building are a stable, coach-house, and several out-houses. The former has been altered to provide a perambulator shed; the coach-house has been utilized to store the ambulance and the van for removal of infected clothing, while the out-houses are being used as store-rooms, etc., in connection with the Health Department.

The meetings at the Centre take place every Tuesday afternoon, and are well attended as the figures below shew. The writer, together with the L.H.V., and a number of volunteer workers, are in attendance at each meeting. Tea is served to the mothers, and every endeavour is made to interest and instruct them in the care of infants

and young children; with this end in view, the work is varied from week to week, viz: on some days instruction on health matters is given by the L.H.V. or myself, and demonstrations on infant feeding, cooking, and the cutting-out and making of children's clothes are given on other days.

Quarterly special Maternity & Child Welfare meetings are now held at two of the outlying hamlets, viz: Belthorn and Knuzden; at the former in the Conservative Club, and at the latter in the school. Both are well attended in proportion to the population of the districts.

The arrangements made with St. Mary's Hospital for Women and Children, Manchester, for the treatment of various cases, still hold good, and during the year the following cases were admitted to that Institution through the medium of the Welfare Centre :—

One case of severe rickets.
,, „ naevus of the face.

985 cartons of dried milk have been disposed of at the Centre in addition to 262 cups of Virol and 44 tins of condensed milk.

278 gallons, one pint of fresh milk were provided *gratis* to necessitous cases.

One case of puerperal fever was reported during the year. Nine cases of ophthalmia neonatorum were notified, and in seven cases both eyes were affected. The cases were kept under observation, and no permanent injury to the eyes resulted. Eight cases of measles were notified, and each case was visited by the L.H.V.

The following is a summary of the work done in connection with Maternity and Infant Welfare :—

Total No. of visits made by L.H.V.	...	...	...	2822
First visits made by L.H.V. to expectant mothers			...	25
Total	„	„	„	60
„ No. of first visits to newly-born children	...	...	...	361
„ „ visits to children under 1 year of age			1805	} 2820
„ „ „ from 1 to 5 yrs of age			1015	

No. of Lectures given by L.H.V. to girls' societies in the Township	...	...	...	...	3
„ Meetings held at Chief Centre	...	...	...	...	45
„ Attendances by adults at Chief Centre	...	...	...	...	1616
„ „ infants	„	...	...	...	1153
Average attendance by adults	„	...	...	...	36
„ „ infants	„	...	...	...	26
Meetings held at Belthorn Centre	...	...	...	...	2
Average attendance by adults at Belthorn Centre	...	...	...	...	16
„ „ infants	„	...	...	...	12
Meetings held at Knuzden Centre	...	...	...	...	2
Average attendance by adults at Knuzden Centre	...	...	...	...	12
„ „ infants	„	...	...	...	9
Total No, of Consultations held by M.O.	{ Mothers 22 Infants 245 }				267
No. of births notified	...	...	{ Still-births 17 Live „ 330 }		347
„ registered but not notified	...	...	...	...	20

The 17 cases where still-births occurred were visited by the L.H.V. and an endeavour made to ascertain the probable cause. The following were the reasons attributed :—

- 4 appeared to be due to diseases in the mother.
- 3 due to difficult labour.
- 2 „ shock and fright.
- 1 „ falling down stairs.
- 2 „ malformation of the foetus.
- 3 „ prematurity.
- 2 the result of drugs.

As regards the social side of the work, two outings were arranged for the mothers and children : one to Morecambe and one to Southport, and at Christmas a tree and entertainment were provided.

HOUSING.

I am greatly indebted to Mr. Hunter, the Surveyor, for his very able assistance in compiling the following particulars of the housing conditions in the district:—

The houses are nearly all built of stone and substantially constructed, the number of brick-built houses being very small.

During the course of erection all new houses are inspected, and during the laying of the drains the fall in the pipes and cementing of the joints is carefully examined, also the fitting up of water closets and baths.

A minimum of 150 superficial feet of yard space is given to each house, and a back road 12 feet wide is provided behind each block of buildings.

Total No. of houses in the district	...	3824
„ „ for the working-classes	...	3106
„ „ erected during 1920	...	0
Average No. of working-class houses built annually during the 5 years before the war	...	47

There are no empty buildings which might be made suitable by repairs or alterations for housing the working-classes or converted into flats.

Population before the war	...	16005
Average annual increase of population for the 5 years before the war	...	97
Estimated present population	...	14942
Anticipated increase or decrease of working-class population due to industrial changes	...	0

Houses built during the following years:—

1910	...	61	}	238 houses built during 5 years, average 47 per year.
1911	...	82		
1912	...	30		
1913	...	26		
1914	...	39		
1915	...	8		
1916	...	0		
1917	...	0		
1918	...	0		
1919	...	1		
1920	...	0		

Year	Houses inhabited	Houses uninhabited	Total houses	Population according to census	Average No. of persons per house inhabited
1891	...	516	3269	...	4.829
1901	3067	295	3362	14192	4.627
1911	3554	94	3648	15714	4.421
1920	3821	3	3824	estimate 14942	3.911

During the 5 years—1914, 1915, 1916, 1917, and 1918, 497 marriages took place and only 47 houses were built during the same period, compared with an average of 47 per year in the 5 years—1909, 1910, 1911, 1912, & 1913.

In the course of investigations in 1919, 30 houses were found to be overcrowded, further particulars are given below:—

Houses with only Two Bedrooms occupied with Two or more Families or Lodgers.

There are 85 houses with only two bedrooms occupied with two or more families or lodgers, and containing a total of 572 persons: equal to 6.73 persons per house. Of these houses with only two bedrooms, there are—

10 houses with 5 persons per house.

35	„	6	„
14	„	7	„
15	„	8	„
8	„	9	„
1 house		10	„
1 „		13	„

In these houses with two bedrooms there are cases where the son and his wife are living with his parents. These young married people should, if possible, be provided with separate houses to prevent overcrowding.

The houses with only two bedrooms do not provide for separating the boys and girls. At one house in Percy Street, with only two bedrooms, were found husband, wife, a brother, and four girl lodgers.

In addition to the above, there are 57 houses with three bedrooms occupied by two or more families, making a total of 142 houses occupied by more than one family.

To meet the deficiency now existing, it is estimated that 104 houses will be required during the next three years, and land has been procured by the Council at Fielding Lane, White Ash Farm, & Thwaites Road, for the purpose of erecting houses.

Schemes have been approved for the erection of 22, but up to the end of the year under review building has not been actually commenced.

Prevailing Rents of the various types of Working-Class Houses in the District.

	Weekly Rent. Plus increases under Rent Act.
<i>a.</i> Houses with living room, back kitchen and scullery combined in one room, and two bedrooms ...	4/6
<i>b.</i> Living room, back kitchen and scullery combined in one room, and three bedrooms ...	4/6
<i>c.</i> Parlour, living room, scullery, and two bedrooms ...	4/7
<i>d.</i> Parlour, living room, scullery, and three bedrooms	5/4
<i>e.</i> Parlour, living room, scullery, and four bedrooms	8/0
<i>f.</i> Tenements in block buildings ...	none.

The number of back to back houses is very small, and there are no common lodging-houses in the Township.

The general defects found to exist were dampness, defective ventilation, defective drainage, and insanitary ash-pits.

Unhealthy areas. There are no 'unhealthy areas' in the Township, but there are a few isolated cottages which are not altogether satisfactory, and these are mainly in the country parts of the district.

There are no inhabited houses which are not fit and cannot be made fit for human habitation, and there are no houses already subject to closing orders or demolition orders. The number of houses which are seriously defective but can be made habitable is 127, and these are being dealt with by the Council.

The following Bye-laws relating to housing have been adopted by the Council:—

	Adopted
<i>a.</i> Common Lodging-houses ...	Dec. 1st. 1884.
<i>b.</i> Houses let in Lodgings or occupied by members of more than one family ...	Dec. 1st, 1884.
<i>c.</i> Tents, Vans, and Sheds ...	Dec. 18th, 1913.

These last Bye-laws were rendered necessary owing to a settlement of caravans having been established in the Township.

APPENDICES.

HOUSING CONDITIONS.

STATISTICS. YEAR ENDED 31st DECEMBER, 1920.

I.—GENERAL.

1.	Estimated population ...	...	...	14942
2.	General death-rate ...	...	...	12.5
3.	Death-rate from Tuberculosis ...	...	...	0.85
4.	Infantile Mortality ...	...	...	69
5.	Number of dwelling-houses of all classes ...	...	...	3824
6.	Number of working-class dwelling-houses ...	...	...	3106
7.	Number of new working-class houses erected ...	...	...	0

2.—UNFIT DWELLING-HOUSES.

I.—Inspection.

1.	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ...	...	...	216
2.	Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910 ...	...	...	162
3.	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	...	...	0
4.	Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ...	...	...	14

II.—Remedy of Defects without service of formal Notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	14
---	-----	-----	----

III.—Action under Statutory Powers.

A. *Proceedings under section 28 of the Housing, Town Planning, &c., Act, 1919.*

1.	Number of dwelling-houses in respect of which notices were served requiring repairs	...	0
2.	Number of dwelling-houses which were rendered fit—		
	(a) by owners	... ..	0
	(b) by Local Authority in default of owners		0
3.	Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners on intention to close	... ..	0

B. *Proceedings under Public Health Acts.*

1.	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	... ..	181
2.	Number of dwelling-houses in which defects were remedied—		
	(a) by owners	... ..	181
	(b) by Local Authority in default of owners		0

C. *Proceedings under sections 17 and 18 of the Housing, Town Planning, &c., Act, 1909.*

1.	Number of representations made with a view to the making of Closing Orders	... ..	—
2.	Number of dwelling-houses in respect of which Closing Orders were made	... ..	—
3.	Number of dwellinghouses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	... ..	—
4.	Number of dwelling-houses in respect of which Demolition Orders were made	... ..	—
5.	Number of dwelling-houses demolished in pursuance of Demolition Orders	... ..	—

3.—UNHEALTHY AREAS.

Areas represented to the Local Authority with a view to Improvement Schemes under (a), Part I., or (b), Part II., of the Act of 1890 :—

1. Name of Area	...	...	...	...	—
2. Acreage	...	...	...	...	—
3. Number of working-class houses in area				...	—
4. Number of working-class persons to be displaced				...	—

4.—Number of houses not complying with the building bye-laws erected with consent of Local Authority under section 25 of the Housing, Town Planning, &c., Act, 1919	...	—
---	-----	---

5.—Staff engaged on housing work with, briefly, the duties of each officer :— The Sanitary Inspector has been appointed to do this work.

The administration of the Factory and Workshop Act, 1901,
in connection with

Factories, Workshops, Workplaces, & Homework.

I.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR
INSPECTORS OF NUISANCES.

Premises. (1)	Number of		
	Inspections (2)	Written Notices (3)	Prosecutions (4)
Factories (Including Factory Laundries) ..	5	—	—
Workshops (Including Workshop Laundries) ..	83	—	—
Workplaces (Other than Outworkers' premises included in part 3 of this report)			
Total	88	—	—

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s 131) at the end of the year. (1)	Number (2)
Painters	5
Pickle Manufacturers	1
Bakehouses	20
Boot and Clog Makers	10
Dressmakers and Milliners	10
Joiners	4
Plumbers	2
Tinplate Workers	2
Wheelwrights	3
Tailoring	4
Smiths	3
Other Trades	3
Total number of Workshops on Register	67

5.—OTHER MATTERS.

Class. (1)	Number (2)
<i>Matters notified to H.M. Inspector of Factories:—</i>	0
Failure to affix Abstract of the Factory & Workshop Act (s. 133)..	0
Actions taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s 5)	Notified by H.M. Inspector 1 Reports (of action taken) sent to H.M. Inspector.. 1
Other	0
<i>Underground Bakehouses (s. 101) :—</i>	
Certificates granted during the year	0
In use at the end of the year	0

**Acts of Parliament relating to Sanitary matters
adopted by the Council.**

- | | |
|--|-----------------------------|
| (1) The Infectious Disease (Notification) Act, 1889, | Adopted
Nov. 11th, 1895. |
| (2) The Public Health Acts Amendment Act, 1890,
Parts ii, iii, iv, and v. ... | Dec. 8th, 1895. |
| (3) The Infectious Disease (Prevention) Act, 1890, | Dec. 14th, 1903. |
| (4) The Public Health Acts Amendment Act, 1907,
Parts ii, iii, iv, (certain sections thereof)
v, vi, vii, (except sections 82 and 83)
viii, ix, and x, (sections 93 and 95) ... | July 13th, 1908. |

—————:00:—————

**Bye-Laws relating to Sanitary matters adopted
by the Council.**

- | | |
|--|-----------------------|
| (1) Slaughterhouses | Mar. 21st, 1864. |
| (2) Snow, Filth, and Keeping of Animals | Mar. 21st, 1864. |
| (3) Cleansing Footway and Pavements ... | Mar. 24th, 1864. |
| (4) Common Lodging-houses ... | Dec. 1st, 1884. |
| (5) Houses let in Lodgings, or occupied by mem-
bers of more than one family ... | Dec. 1st, 1884. |
| (6) Dairies, Cowsheds, and Milkshops ... | Aug. 18th, 1902. |
| (7) New Streets and Buildings ... | Mar. 14th, 1904. |
| (8) Slaughterhouses | September 19th, 1912. |
| (9) Offensive Trades | Feby. 20th, 1913. |
| (10) Regulations for Preventing the Waste, Misuse,
Undue Consumption, or Contamination of
Water | July 24th, 1913. |
| (11) Tents, Vans and Sheds | Dec. 18th, 1913. |
| (12) Whirligigs, Swings, and Shooting Ranges and
Galleries | Dec. 18th, 1913. |
| (13) Nuisances | July 22nd, 1920. |

